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AUSTRALIAN MUSEUM, SYDNEY.

(CATALOGUE No. 15.)

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CATALOGUE

OF THE

MARINE SHELLS OF AUSTRALIA AND TASMANIA.

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PART II.

PTEROPODA.

BY

JOHN BRAZIER, C.M.Z.S., F.L.S.

PRINTED BY ORDER OF THE TRUSTEES.
E. P. Ramsay, Curator.

Sydney:
CHARLES POTTER, GOVERNMENT PRINTER.

1892.

5e 4—92 A

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This portion of the Catalogue contains the Pteropoda (Hyalæa) Families, Limacinidæ, Cavoliniidæ, Notobranchæidæ, and Clionidæ.

The exact habitats are given of those species found by the compiler on the beaches and obtained in the towing net off the New South Wales coast, Torres Straits, and Northern Territory.

It does not appear that any species have ever been recorded from Tasmania, South or Western Australia.

J. BRAZIER.

PTEROPODA.

Order I.—THECOSOMATA.

Family I.—LIMACINIDÆ.

Limacina inflata, d'Orbigny.

Atlanta inflata, d'Orbigny, Voyage dans l'Amérique, Vol. V, p. 174, pl. 12, figs. 16, 19, 1836.

Spirialis rostralis, Eydoux et Souleyet, Description sommaire de plusieurs Ptéropodes nouveaux ou imparfaitement connus, Revue Zoologique, Vol. III, p. 236, 1840.

Limacina inflata, Gray Catalogue of the Mollusca in the British Museum, part ii, Pteropoda, p. 31, 1850.

Spirialis rostralis, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 216, pl. 13, figs. 1, 10, 1852.

Limacina scaphoidea, Gould, The Mollusca and Shells of the United States, Exploring Expedition, p. 485, pl. 51, fig. 602, 1852.

Protomedea elata, O. G. Costa, Microdoride mediterranea, p. 74, pl. 11, fig. 5, 1861.

Embolus rostralis, Jeffreys, Mediterranean Mollusca, Ann. and Mag. Nat. Hist., ser. 4, Vol. VI, p. 86.

Protomedea rostralis, Fischer, Sur la faune Malacologique abyssale de la Méditerranée, Comptes rendus, T. XCIV, p. 120, 1882.

Limacina inflata, Pelseneer, Report on the Pteropoda, H.M.S. "Challenger," Zoology, Vol. XXIII, p. 16, 1888.

Limacina inflata, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 769, 1889.

Habitat.—Between Sydney and Melbourne. (H.M.S. "Challenger"). Broken Bay, Port Stephens, Coogee Bay, New South Wales; found in shell sand. (J. Brazier.)

Limacina Lesueuri, d'Orbigny.

Atlanta Lesueuri, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 177, pl. 20, figs. 12, 15, 1836.

Atlanta Rangii, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 176, pl. 12, figs. 25, 28, 1836.

Spirialis ventricosa, Eydoux et Souleyet, Description sommaire de plusieurs Ptéropodes nouveaux au imparfaitement connus, Revue Zoologique, Vol. III, p. 236, 1840.

Limacina ventricosa, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 32, 1850.

Spirialis ventricosa, Eydoux et Souleyet, Voyage de la "Bonite," Vol. II, p. 218, pl. 13, figs. 11, 16, 1852.

Spirialis ventricosa, Rang et Souleyet, Hist. Nat. des. Moll.. Ptéropodes, p. 63, pl. 14, figs. 13, 18, 1852.

Limacina Lesueuri, Boas, Spolia Atlantica, p. 46, pl. 3, figs. 33, 34, 1886.

Limacina lesueuri, Pelseneer, Report on the Pteropoda, H.M.S. "Challenger," Zoology, Vol. XXIII, p. 24, 1888.

Limacina Lesueuri, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 770, 1889.

Habitat.—Between Sydney and Melbourne. (H.M.S. "Challenger"). Broken Bay, Port Stephens, New South Wales; in shell sand. (J. Brazier.)

Limacina trochiformis, d'Orbigny.

Atlanta trochiformis, d'Orbigny, Voyage dans l'Amérique méridionale. Vol. V, p. 177, pl. 12, figs. 29, 31, 1836.

Spirialis trochiformis, Eydoux et Souleyet, Description sommaire de quelques Ptéropodes nouveaux ou imparfaitement connus, Revue Zoologique, Vol. III, p. 237, 1840.

Limacina trochiformis, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 33, 1850.

Limacina naticoides, Rang, Hist. Nat. des Moll., Ptéropodes, pl. 10, fig. 1–2, 1852.

Spirialis trochiformis, Eydoux et Souleyet, Voyage de la "Bonite," Vol. II, p. 223, pl. 13, figs. 27, 34, 1852.

Spirialis trochiformis, Rang et Souleyet, Hist. Nat. des Moll., Pteropodes, p. 64, pl. 14, fig. 27–31.

Limacina trochiformis, Boas, Spolia Atlantica, p. 45, 1886.

Limacina trochiformis, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 29, 1888.

Limacina trochiformis, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood. Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 771, 1889.

Habitat.—Between Melbourne and Sydney. (H.M.S. "Challenger"). Broken Bay, Port Stephens, Coogee Bay, New South Wales; found in shell sand. (J. Brazier.)

Limacina bulimoides, d'Orbigny.

Atlanta bulimoides, d'Orbigny, Voyage dans l'Amérique méridionale. Vol. V. p. 179, pl. 12, figs. 36, 38, 1836.

Spirialis bulimoides, Eydoux et Souleyet, Revue Zoologique, Vol. III, p. 238, 1840.

Limacina bulimoides, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 34, 1850.

Spirialis bulimoides, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 224, pl. 13, figs. 35, 42, 1852.

Spirialis bulimoides, Rang et Souleyet, Hist. Nat. des. Moll., Ptéropodes, p. 65, pl. 15, figs. 1, 5, 1852.

Heterofusus bulimoides, Angas, Marine Mollusca of Port Jackson, Proc. Zool. Soc., London, p. 99, 1877.

Limacina bulimoides, Boas, Spolia Atlantica, p. 47, pl. 3, figs. 36, 37, 1886.

Limacina bulimoides, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 31, 1888.

Limacina bulimoides, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 772, 1889.

Habitat.—Broken Bay, Port Stephens, Botany Bay, New South Wales; found in shell sand on beaches. (J. Brazier.) Between Melbourne and Sydney in towing net. (H.M.S. "Challenger.")

Family II.—CAVOLINIDÆ.

Clio (Creseis) virgula, Rang,

Creseis virgula, Rang, Notice sur quelques Mollusques nouveaux du genre Cleodora, Ann. d Sci. Nat., sér. 1, Vol. XIII, p. 316, pl. 17, fig. 2, 1828.

Creseis unguis, Eschscholtz, Zoologischer Atlas, Heft. III, p. 17, pl. 15, fig. 4, 1829.

Creseis cornucopiæ, Eschscholtz, Zoologischer Atlas, Heft III, p. 17. pl. 15, fig. 5, 1829.

Creseis caligula, Eschscholtz, Zoologischer Atlas, Heft III, p. 18, pl. 15, fig, 6, 1829.

Hyalæa corniformis, d'Orbigny, Voyage dans l'Amérique méridionale. Vol. V, p. 120, pl. 8, figs. 20, 23, 1836.

Styliola virgula, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 17, 1850.

Styliola corniformis, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 17, 1850.

Cleodora virgula, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 196, pl. 8, figs. 18, 25, 1852.

Cleodora munda, Gould, Mollusca and Shells of the United States Exploring Expedition, p. 489, pl. 51, fig. 607, 1852.

Cleodora placida, Gould, Mollusca and Shells of the United States Exploring Expedition, p. 489, pl. 51, fig. 606, 1852.

Cleodora falcata, Gould, Mollusca and Shells of the United States Exploring Expedition, p. 490, pl. 51, fig. 608, 1852.

Creseis virgula, Sowerby, in Reeve, Conch. Icon., Vol XX, Pteropoda, pl. 5, fig. 32, 1877.

Cleodora flexa, Pfeffer, Akad. d. Wiss. Berlin, p. 241, figs. 15, 16, 1879.

Creseis virgula, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 2, figs. 39, 40, 1884.

Cleodora virgula, Boas, Spolia Atlantica, pp. 57, 210, pl. 5, fig. 71; pl. 6, fig. 94 a,b, 1886.

Clio (*Creseis*) *virgula*, Pelseneer, Report on the Pteropoda, H.M.S. "Challenger," Zoology, Vol. XXIII, p. 48, 1888.

Clio (*Creseis*) *virgula*, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, 773. 1889.

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Stephens, Broken Bay, New South Wales; in shell sand after gales. (J. Brazier.) Off Sydney Heads in towing net; between Melbourne and Sydney. (H.M.S. "Challenger.")

Clio (Creseis) acicula, Rang.

Creseis acicula, Rang, Ann. d. Sci. Nat., sér. 1, Vol. XIII, p. 318, pl. 17, fig. 6, 1828.

Creseis clava, Rang, Ann. d. Sci. Nat., sér. 1. Vol. XIII, p. 317, pl. 17, fig. 5, 1828.

Creseis acus, Eschscholtz, Zoologischer Atlas, Heft. III, p. 17, pl. 15, fig. 2, 1829.

Hyalæa aciculata, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 123, pl. 8, figs. 29, 31, 1836.

Styliola recta, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 18, 1850.

Cleodora acicula, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 104, pl. 8, figs. 10, 17, 1852.

Cleodora acicula, Rang et Souleyet, Hist. Nat. des. Moll., Ptéropodes, p. 56 pl. 6, fig. 7 and 5, 1852.

Creseis aciculata, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 5, fig. 29, 1877.

Creseis aciculata, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 2, fig. 15, 16 1884.

Cleodora acicula, Boas, Spolia Atlantica, p. 59, pl. 6, fig. 94, 1886.

Clio (*Creseis*) *acicula*, Pelseneer, Report on the Pteropoda, H.M.S. "Challenger," Zoology, Vol. XXIII, p. 48, 1888,

Clio (*Creseis*) *acicula*, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, 774, 1889.

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Stephens, Broken Bay, New South Wales; in shell sand after gales. (J. Brazier.) Off Sydney Heads in towing net: Torres Straits. (H.M.S. "Challenger.")

Clio (Hyalocylix) striata, Rang.

Creseis striata, Rang, Ann. d. Sci. Nat., sér. 1, Vol. XIII, p. 315, pl. 15, fig. 7, 1828.

Creseis compressa, Eschscholtz, Zoologischer Atlas, Heft. III, p. 17, pl. 15, fig. 7, 1829.

Creseis zonata, Delle Chiaje, Memorie sulla storia e notomia degli animali senza vertebre, pl. 82, fig, 9, 1830.

Styliola striata, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 18, 1850.

Cleodora striata, Rang et Souleyet, Hist. Nat. des. Moll., Ptéropodes, p. 55 pl. 6. fig. 3, 1852.

Cleodora striata, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 191, pl. 8, figs. 1, 4, 1852.

Creseis phæostoma, Troschel, Archiv f. Naturgesch, p. 206, pl. 8, figs. 5, 7, 1854.

Creseis striata, Sowerby in Reeve, Conch. Icon., Vol. XX, pl. 5, Pteropoda, fig. 30,[a,b,] 1877.

Creseis striata, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 2, fig. 38, 1884.

Cleodora striata, Boas, Spolia Atlantica, pp. 62, 202, 1886.

Clio (*Hyalocylix*) *striata*, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 54, pl. 2, fig. 3, 1888.

Clio (*Hyalocylix*) *striata*, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 775, 1889.

Habitat.—Cabbage-tree Bay or Shallow Beach, Manly Beach, Port Stephens, Broken Bay, New South Wales; in shell sand after gales; Torres Straits; Port Darwin. (J. Brazier.) Raine Island, near Torres Straits; 135 fathoms. (H.M.S. "Challenger.")

Clio (Styliola) subula, Quoy and Gaimard.

Styliola recta, Lesueur, in de Blainville, Manuel de Malacologie, p. 655, 1825.

Cleodora subula, Quoy et Gaimard, Observations Zoologiques faites à bord de "l'Astrolabe," Ann. d. Sci. Nat, sér. 1, Vol. X, p. 223, pl, 8. D. figs. 1, 3, 1827.

Creseis spinifera, Rang, Ann. d. Sci. Nat., sér. 1, Vol. XIII, p. 313, pl. 17, fig. 1, 1828.

Creseis subula, Rang, Ann. d. Sci. Nat., sér. 1, Vol. XXIII, p. 313, pl. 17, fig. 1, 1828.

Hyalæa subula, d'Orbigny, Voyage dans l'Amérique, Vol. V, p. 119, pl. 8, figs. 15, 19, 1836.

Styliola subula, Gray, Catalogue of the Mollusca in the British Museum, part II., Pteropoda, p. 17, 1850.

Cleodora subulata, Rang et Souleyet, Hist. Nat. des. Moll., Ptéropodes, p. 55. pl. 6, fig, 1, 1852.

Cleodora subulata, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 192, pl. 8, fis. 5, 9, 1852.

Styliola subulata, Angas, Marine Mollusca of Port Jackson, Proc. Zool. Soc. London, p. 178, 1877.

Creseis spinifera, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 5, fig. 33, 1877.

Creseis spinifera, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 2, figs. 43, 44, 1884.

Cleodora subu'a, Boas, Spolia Atlantica, pp. 65, 202, pl. 4, figs. 41, 45, 1886.

Clio (*Styliola*) *subula*, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 57, 1888,

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Stephens, Broken Bay, Bellinger River, New South Wales; in shell sand after gales; Port Darwin. (J. Brazier.) Off Sydney and Melbourne, in towing net; Raine Island, near Torres Straits. (H.M.S. "Challenger,")

Clio pyramidata, Linné.

Clio pyramidata, Linné, Systema Naturæ, ed. 12, p. 1094, 1767.

Hyalæa lanceolata, Lesueur, Mémoire sur quelques espèces d'animaux mollusques et radiaires recueillis dans la Méditerranée près de Nice, Nouv. Bull. Soc., Philom., Paris, Vol. III, p. 284, pl. 5, fig. 3, 1813.

Cleodora Brownii, De Blainville, Manuel de Malacologie, pl. XLVI, fig. 1, 1825.

Hyalæa pyramidata, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 113, pl. 7, figs. 25, 29, 1836.

Cleodora Lamartinieri, Rang, in d'Orbigny, Mollusques de Cuba, p. 83, 1841.

Clio pyramidata, Gray, Catalogue of the Mollusca in the British Museum, part II., Pteropoda, p. 12, 1850.

Cleodora lanceolata, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. V, p. 179, pl. 6, figs. 17, 25, 1852.

Cleodora pyramidata, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 50, pl. 5, fig. 11, figs. 7, 10, 1852.

Cleodora exacuta, Gould, The Mollusca and Shells of the U.S. Exploring Expedition, p. 488, pl. 51, fig. 605, 1852.

Cleodora lobata, Sowerby, in Reeve, Conch. Icon., Vol. XX, Pteropoda, fig. 26, 1877.

Cleodora martensii, Pfeffer, Du Pteropoden des Hamburger Museums, Abhandl. d. Naturw. Ver. Hamburg, Bd. VII, p. 95, pl. 7, fig. 16, 1880.

Cleodora pyramidata, Boas, Spolia Atlantica, p. 69, pl. 6, figs. 96–97, 1886.

Clio pyramidata, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Vol. XXIII, p. 63, 1888.

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach; Port Stephens, Broken Bay, New South Wales; in shell sand after gales. (J. Brazier.) Off Sydney Heads, 950 fathoms, bottom green mud; off Melbourne, in towing net; Raine Island, near Torres Straits. (H.M.S. "Challenger.")

Cuvierina columnella, Rang.

Cleodora obtusa, Quoy et Gaimard, Voyage de l' "Uranie," Zoologie, p. 115, pl. 66, fig. 5, 1824.

Cuvieria columnella, Rang, Ann. des Sc. Nat., Vol. XII, p. 323, pl. 15, figs. 1, 8, 1827.

Cuvieria oryza, Benson, Corrected characters of the genus Cuvieria and notice of a second species inhabiting the tropical Indian Ocean, Journal Asiat., Soc. Bengal, Vol. IV, p. 698, 1835.

Triptera columnella, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 23, 1850.

Cuvieria urceolaris, Mörch, Catalogus conchyliorum quae reliquit, C. P. Kjerulf, p. 32, 1850.

Cuvieria columnella, Eydoux et Souleyet, Voyage de la "Bonite," Vol. II, p. 205, pl. 12, figs. 1, 11, 1852.

Cuvieria columnella, Rang et Souleyet, Hist. Nat. des Moll. Ptéropodes, p. 59, pl. 4, pl. 14, figs. 1, 6, 1852.

Triptera columnella, Angas, Marine Mollusca of Port Jackson, Proc. Zool. Soc., London, p. 179, 1877.

Triptera columnella, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda pl. 5, fig. 27, 1877.

Triptera columnella, Pfeffer, Monatsber. d. k. preuss. Akad. d. Wiss., Berlin, p. 243, fig. 18, 1879.

Triptera cancellata, Pfeffer, Monatsber. d. k. preuss. Akad. d. Wiss., p. 243, fig. 19. 1879.

Triptera columnella, Sowerby, Thes. Conch., Vol. V, p. 145, Pteropoda, pl. 2, fig. 49, 1884.

Cuvierina columnella, Boas, Spolia Atlantica, pp. 131, 133, pl. 3, fig. 39, pl. 6, fig. 95, 1886.

Cuvierina columnella, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 67, 1888.

Cuvierina columnella, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 778, 1889.

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach; Port Stephens, Broken Bay, New South Wales. (A.M.) In shell sand on the beaches after gales. Off Sydney Heads, in towing net; Port Darwin. (J. Brazier.) (A.M.) Raine Island, near Torres Straits. (H.M.S. "Challenger.")

Cavolinia trispinosa, Lesueur.

Anomia aculeata major, Chemnitz, Conch. Cab., Vol. VIII, Vignette, plate 13, p. 65, letter a, b, pp. 71, 92, 1785.

Anomia aculeata maxima, Chemnitz, Conch. Cab., Vol. VIII, Vignette, plate 13, p. 65, letters c, d, pp. 71, 93, 1785.

Hyalæa trispinosa, Lesueur, MS. in de Blainville, Hyale, Dict. d. Sci. Nat., Vol. XXII, p. 82, 1821.

Hyalæa mucronata, Quoy et Gaimard, Observations Zoologiques faites à bord de l' "Astrolabe," Ann. d. Sci. Nat., sér. 1, Vol. X, p. 231, pl. 8B, figs. 1, 2, 1827.

Hyalæa depressa, Bivona, Descrizione di una nuova specie di Jale, Efemeridi scientifiche e litterarie per la Sicilia, p. 57, pl. 1, figs. 4, 5, 1832.

Hyalæa cuspidata, Delle Chiaje, Descrizione notomia degli animali senza vertebre del Regno di Napoli, pl. 180, figs. 1, 2 (*non* d'Orbigny), 1841.

Diacria trispinosa, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 10, 1850.

Diacria mucronata, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 11, 1850.

Hyalæa trispinosa, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 161, pl. 6, figures 1, 10, 1862.

Hyalæa trispinosa, Rang et Souleyet, Hist. Nat. des Moll. Ptéropodes, p. 45, pl. 3, figs. 1, 7, 1852.

Hyalæa Reeviana, Dunker, Index Molluscorum, p. 2, pl. 1, figs. 17, 20, 1853.

Pleuropus trispinosus, H. and A. Adams, Genera of Recent Mollusca, Vol. II, p. 611, 1858.

Pleuropus mucronatus, H. and A. Adams, Genera of Recent Mollusca, Vol. II, p. 611, 1858.

Diacria mucronata, Angas, Marine Mollusca of Port Jackson, Proc. Zool. Soc., London, p. 178, 1877.

Hyalæa (*Diacria*) *trispinosa*, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 3, fig. 15, 1877.

Hyalæa (*Diacria*) *mucronata*, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 3, fig. 16, 1877.

Hyalæa (*Diacria*) *trispinosa*, Sowerby, Thes. Conch., Vol. V, p. 141, Pteropoda, pl. 1, fig. 20, 1884.

Hyalæa (*Diacria*) *mucronata*, Sowerby, Thes. Conch., Vol. V, p. 142, Pteropoda, pl. 1, figs. 27, 28, 1884.

Hyalæa trispinosa, Boas, Spolia Atlantica, p. 94, pl. 1, fig. 3; pl. 2, fig. 14, 1886.

Hyalæa trispinosa, Sowerby, Illustrated Index of British Shells, second edition, pl. 10, fig. 1, 1887.

Cavolinia trispinosa, Pelseneer, Report on the Pteropoda, H.M.S. "Challenger," Zoology, Vol. XXIII, pp. 76, 77, 1888.

Cavolina trispinosa, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 779, 1889.

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Stephens, Broken Bay, New South Wales, off Sydney Heads and Bondi Bay in towing net; Torres Straits and inside the Great Barrier Reef in towing net; Port Darwin, in beach sand. (J. Brazier). Off Sydney, 950 fathoms, bottom green sand. (H.M.S. "Challenger.")

Cavolinia quadridentata, Lesueur.

Hyalæa quadridentata, Lesueur, MS., in Blainville, Hyale, Dict. d. Sci. Nat. Vol. XXII, p. 81, 1821.

Hyalæa quadrispinosa, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 85, 1836.

Cavolina quadridentata, Gray, Catalogue of the Mollusca in the British Museum, part II., Pteropoda, p. 8, 1850.

Hyalæa quadridentata, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 147, pl. 4, figs. 25, 32, 1852.

Hyalæa quadridentata, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 39, pl. 3, figs. 13, 15, 1852.

Hyalæa inermis, Gould, The Mollusca and Shells of the United States Exploring Expedition, pl. 51, fig. 604, 1852.

Hyalæa minuta, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 2, fig. 9, 1877.

Hyalæa intermedia, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 2, fig. 10, 1877.

Cavolina quadridentata, Brazier, "Chevert" Expedition. Shells, Proc. Linn. Soc., New South Wales, Vol. II, p. 144, No. 4, 1877, 1878.

Cavolina quadridentata, Angas, Marine Mollusca of Port Jackson, Proc. Zool., Soc, London, p. 178, 1877.

Hyalæa quadridentata, Sowerby in Reeve, Conch. Icon., Vol. XX, pl. 2, fig. 14, 1877.

Hyalæa costata, Pfeffer, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 234, 1879.

Hyalæa quadridentata, Sowerby, Thes. Conch., Vol. V, p. 140, pl. 1, figs. 17 18, 1884.

Hyalæa intermedia, Sowerby, Thes. Conch., Vol. V, p. 141, Pteropoda, pl. 1, fig. 11, 1884.

Hyalæa minuta, Sowerby, Thes. Conch., Vol. V, p. 141, Pteropoda, pl. 1, fig. 19, 1884.

Hyalæa quadridentata, Boas, Spolia Atlantica, p. 99, pl. 1, fig. 4; pl. 2, fig. 15, 1886.

Cavolina quadridentata, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, pp. 78, 79, 1888.

Cavolina quadridentata, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood; Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 780, 1889.

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Jackson, Port Stephens. Broken Bay, New South Wales; Port Darwin. Darnley Island, Torres Straits, 30 fathoms; one specimen found. (J. Brazier.) (A.M.) Raine Island, near Torres Straits. H.M.S. "Challenger."

Cavolinia longirostris, Lesueur.

Hyalæa longirostris, Lesueur, MS., in de Blainville, Hyale, Dict. d. Sci. Nat., Vol. XXII, p. 81, 1821.

Hyaïæa ecaudata, Lesueur, Dict. d. Sci. Nat., Vol. XXII, p. 82, 1821.

Hyalæa limbata, d'Obigny, Voyage dans l'Amérique méridonale, Vol. V, p. 101, pl. 6, figs. 11, 15, 1836.

Cavolina longirostra, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 8, 1850.

Hyalæa angulata, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 152, pl. 5, figs. 1, 6, 1852.

Hyalæa longirostris, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 149, pl. 5, figs. 7, 13, 1852.

Hyalæa longirostris, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 11, pl. 2, figs. 7, 10, 1852.

Hyaæla femorta, Gould, The Mollusca and Shells of the United States Exploring Expedition, pl. 51, fig. 603, 1852.

Hyalæa fissirostris, Benson, Notes on the Pteropodous genus Hyalæa and description of a new species, Ann. and Mag. Nat. Hist. series 3, Vol. VII, p. 26, 1861.

Cavolina longirostris, Angas, Marine Mollusca of Port Jackson, Proc. Zool. Soc., London, p. 178, 1877,

Hyalæa obtusa, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 2, fig. 8, 1877.

Hyalæa longirostris, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 2, fig. 12, 1877.

Hyalæa limbata, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 2, fig. 11, 1877.

Hyalæa limbata, Sowerby Thes. Conch. Vol. V, p. 141, Pteropoda, pl. 1, figs. 14, 15, 1877.

Hyalæa longirostris, Sowerby, Thes. Conch., Vol. V, p. 141, Pteropoda, pl. 1, fig. 16, 1877.

Cavolina longirostra, Brazier, "Chevert" Expedition Shells, Proc. Linn. Soc., New South Wales, Vol. II, p. 144, No. 5, 1877, 1878.

Hylæa longirostris, Boas, Spolia Atlantica, p. 102, pl. 1, fig. 5; pl. 2, fig. 16, 1885.

Cavolinia longirostris, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 79, 1888.

Cavolina longirostris, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 781, 1889.

Habitat.—Port Jackson, Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Stephens, Broken Bay, New South Wales; Fitzroy Island, Princess Charlotte Bay, North-east Australia, 13 fathoms; Darnley Island, Torres Straits, 30 fathoms. (J. Brazier). (A.M.) Melbourne to Sydney, Raine Island, near Torres Straits. (H.M.S. "Challenger.")

Cavolinia globulosa, Rang.

Cavolina globulosa, Rang, MS., in Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 8, 1850.

Cavolina pisum, Mörch, Catalogus conchyliorum quae reliquit C. P. Kjerulf, p. 32, pl. 1, fig. 7, 1850.

Hyalæa globulosa, Rang, His. Nat. des Moll., Ptéropodes, p. 38, pl. 2, figs. 15, 18, 1852.

Hyalæa globulosa, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 142, pl. 4, figs. 20, 24, 1852.

Hyalæa globulosa, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 1, fig. 6, 1877.

Hyalæa globulosa, Pfeffer, 1. Monatsb. Berlin Akad., d. Wiss. Berlin, p. 232, 1879.

Hyalæa globulosa, Sowerby, Thes. Conch., Vol. V, p. 140, Pteropoda, pl. 1, figs. 8, 9, 1884.

Hyalæa globulosa, Boas, Spolia Atlantica, p. 107, pl. 1, fig. 7; pl. 2, fig. 18, 1886.

Cavolinia globulosa, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 81, 1888.

Habitat.—Port Stephens, Port Jackson, New South Wales. (J. Brazier.)

Cavolinia gibbosa, Rang.

Hyalæa gibbosa, Rang., MS., in d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 95, pl. 5. figs. 16, 20, 1836.

Hyalæa flava, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 97, pl. 5, figs. 21, 25, 1836.

Cavolina gibbosa, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 7, 1850.

Cavolina flava, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 8, 1850.

Hyalæa gibbosa, Rang, et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 38, pl. 10, figs. 3, 4, 1852.

Hyalæa gibbosa, Edyoux et Souleyet, Voyage de la "Bonite," Vol. II, p. 144, pl. 4, figs. 13, 19, 1852.

Hyalæa gibbosa, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 1, fig. 7, 1887.

Cavolina gibbosa, Angas, Marine Mollusca of Port Jackson, Proc. Zool. Soc., London, p. 178, 1877.

Hyalæa gegenbauri, Pfeffer, Die Pteropoden der Hamburger Museums, Abhandl. Naturw. Ver. Hamburg, Bd. VII, p. 86, figs. 5, 7, 1880.

Hyalæa gibbosa, Sowerby, Thes. Conch., Vol. XX, p. 140, Pteropoda, pl. 1, figs. 1, 2, 1884.

Hyalæa gibbosa, Boas, Spolia Atlantica, p. 109, pl. 1, fig. 6; pl. 2, fig. 17, 1886.

Cavolinia gibbosa, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 82, 1888.

Cavolinia gibbosa, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 281, No. 783, 1889.

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Stephens, Broken Bay, New South Wales; Port Darwin, North Australia. (J. Brazier.) Raine Island, near Torres Straits. (H.M.S. "Challenger.")

Cavolinia tridentata, Forskål.

Anomia tridentata, Forskål, Descriptiones animalium quae in itinere orientali observavit, p. 124, 1773.

Anomia aurita scarabaeiformis, Chemnitz, Conch. Cab., Vol. VIII, p. 65, Vignette, pl. 13, fig. G, pp. 72, 108, 1785.

Anomia tridentata, Gmelin, Syst. Nat. Vol. 1, part VI, p. 3348, No. 42, 1790.

Cavolinia natans, Abildgaard, Nyere Efterretnig om det Skaldyr som Forskål har beskrevet under Navnet Anomia tridentata, Skirv. naturhist. Selsk., Bd. I, Heft. 2, pl, 10, 1791.

Hyalæa cornea, Lamarck, Anim. sans. Vert., p. 140, 1801.

Hyalæa papilionacea, Bory de St. Vincent, Voyage dans les quatre principales îles des mers d'Afrique, Vol. I, p. 137, pl. 5, fig. 1, 1804.

Hyalæa Peroni, Lesueur, Mémoire sur quelques animaux mollusques, &c., Nouv. Bull. Soc. Philom., Vol. III, p. 284, 1813.

Hyalæa Chemnitziana, Lesueur, Nouv. Bull. Soc. Philom., Vol. III, p. 284, 1813.

Hyalæa Australis, Peron, Voyage de découvertes aux terres australes, Vol. I, pl. 31, fig. 5, 1816.

Hyalæa tridentata, Lamarck, Anim. sans Vert., Vol. VI, part I, p. 286, 1819

Hyalæa Forskahlii, Lesueur, MS., in de Blainville, Hyale, Dict. d. Sci. Nat. Vol. XXII, p. 79, 1821.

Hyalæa affinis, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V., p. 91, pl. 3, figs. 6, 10, 1836.

Hyalæa tridentata, Lamarck (ed Deshayes), Vol. VII, p. 415, 1836.

Hyalæa truncata, Krauss, Südafricanische Mollusken, p. 34, pl. 2, fig. 12 (*non* Lesueur), 1848.

Cavolina tridentata, Gray, Catalogue of the Mollusca in the the British Museum, part II, Pteropoda, p. 6, No. 1, 1850.

Hyalæa tridentata, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. IV, p. 137, pl. 4, figs. 1 to 7, 1852.

Hyalæa tridentata, Rang et Souleyet, Hist. Nat. de Moll., Ptéropodes, p. 35, pl. 2, figs. 1, 5, 6, pl. 12; figs. 1, 4, 1852.

Cavolinia telemus, A. Adams, On the Synonyms and Habitats of Cavolinia, Diacria, and Pleuropus, Ann. and Mag. Nat. Hist., Series 3, Vol. III, p. 44, 1859.

Hyalæa affinis, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 1, fig. 3, 1877.

Hyalæa tridentata, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 1, fig. 4, 1877.

Hyalæa Cumingii, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 1, fig. 5, 1877.

Hyalæa Cumingi, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 1, fig. 4, 1884.

Hyalæa tridentata, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 1, fig. 5, 1884.

Hyalæa affinis, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 1, fig. 10, 1884.

Hyalæa tridentata, Boas, Spolia Atlantica, p. 115, pl. 1, fig. 8; pl. 2, fig. 19, p. 211, 1886.

Cavolinia tridentata, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 83, 1888.

Habitat.—Broken Bay, Port Stephens (A.M.); Bellinger River, New South Wales; beaches after stormy weather. (J. Brazier).

Cavolinia uncinata, Rang.

Hyalæa uncinata, Rang, MS., in d'Orbigny, Voyage dans l'Amerique méridionale, Vol. V, p. 93, pl. 5, figs. 11, 15, 1836.

Cavolina uncinata, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 7, 1850.

Hyalæa uncinata, Eydoux et Souleyet, Voyage de la "Bonite," Vol. II, p. 140, pl. 4, figs. 8, 12, 1852.

Hyalæa uncinata, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 37, pl. 2. figs. 11, 14, 1852.

Hyalæa uncinata, Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 1, fig. 1, 1877.

Hyalæa uncinatiformis, Pfeffer, Die Pteropoden des Hamburger Museums Abhandl. Naturw. Ver. Hamburg, Bd. 7, p. 85, 1880.

Hyalæa uncinata, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 1, figs. 6, 7, 1884.

Hyalæa uncinata, Boas, Spolia Atlantica, p. 119, pl. 1, fig. 10; pl. 2, fig. 20, 1886.

Cavolinia uncinata, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 84, 1888.

Habitat.—Port Jackson (A.M.), Cabbage-tree Bay, or Shallow Beach, Manly Beach, Port Stephens, New South Wales; Port Darwin, North Australia. (J. Brazier); Raine Island, near Torres Straits. (H.M.S. "Challenger.")

Cavolinia inflexa, Lesueur.

Hyalæa inflexa, Lesueur, Mémoire sur quelques animaux mollusques, Nouv. Bull. Soc. Philom., Vol. III, p. 285, pl. 5, fig. 3, 1813.

Hyalæa elongata, Lesueur, MS., in de Blainville, Hyale, Dict. d. Sci. Nat., Vol. XXII, p. 82, 1821.

Hyalæa vaginellina, Cantraine, Bull. Acad. d. Sc., Bruxelles, Vol. II, p. 380, 1835.

Hyalæa labiata, d'Orbigny, Voyage dans l'Amérique méridionale, Vol. V, p. 104, pl. 6, figs. 21, 25, 1836.

Hyalæa uncinata, Hœninghaus, MS., in Phillippi, Enumeratio Molluscorum utriusque Siciliæ, p. 101, pl. 6, fig. 18 (*non* Rang), 1836.

Cavolina inflexa, Gray, Catalogue of the Mollusca in the British Museum, part 2, Pteropoda, p. 9, 1850.

Hyalæa inflexa, Eydoux et Souleyet, Voyage de la "Bonite," Vol. II, p. 156, pl. 5, figs. 21, 26, 1852.

Hyalæa inflexa, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 44, pl. 3, figs. 9, 10, 12, 1852.

Hyalæa labiata, Eydoux et Souleyet, Voyage de la "Bonite," Vol. II, p. 159, pl. 5, figs. 27, 32, 1852.

Hyalæa labiata, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 43, pl. 12, figs. 15, 19, 1852.

Cavolina inflexa, Angas, Molluscan Fauna of Port Jackson, Proc. Zool. Soc., p. 178, 1877.

Hyalæa inflexa (*Diacria*), Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 3, fig. 17[a, b], 1877.

Hyalæa labiata (*Diacria*), Sowerby in Reeve, Conch. Icon., Vol. XX, Pteropoda, pl. 3, fig. 18[a, b], 1877.

Hyalæa imitans, Pfeffer, Die Pteropoden des Hamburger Museums, Abhandl. Naturw. Ver. Hamburg, Bd. 7, p. 90, pl. 7, fig. 9[a], 1880.

Cleodora inflexa, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 1, figs. 21, 22, 1884.

Diacria labiata, Sowerby, Thes. Conch., Vol. V, Pteropoda, pl. 1, figs. 23, 24, 1884.

Hyalæa inflexa, Boas, Spolia Atlantica, p. 123, pl. 1, fig. 11; pl. 2, fig. 21, 1886.

Cavolinia inflexa, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 85, 1888.

Cavolina inflexa, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood; Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 281, No. 784, 1889.

Habitat.—Port Jackson, Broken Bay, Port Stephens, New South Wales; Port Darwin, North Australia, and in towing net, Torres Straits. (J. Brazier). Raine Island, near Torres Straits. (H.M.S. "Challenger").

Cleodora compressa, Souleyet.

Clio depressa, Gray, Catalogue of the Mollusca in the British Museum, part II, Pteropoda, p. 14, No. 14, 850.

Cleodora compressa, Eydoux et Souleyet, Voyage de la "Bonite," Zoologie, Vol. II, p. 181, pl. 6, figs. 26, 32, 1852.

Cleodora compressa, Rang et Souleyet, Hist. Nat. des Moll., Ptéropodes, p. 51, pl. 12, figs. 20, 25, 1852.

Cleodora compressa, Boas, Spolia Atlantica, p. 85, pl. 4, fig. 58, bis; pl. 4, fig. 50, bis, 1886.

Cleodora compressa, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XXIII, p. 87, 1888.

Cleodora compressa, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 281, 1889.

Habitat.—Cabbage-tree Bay, or Shallow Beach, Manly Beach, New South Wales; Port Darwin. (J. Brazier); Melbourne to Sydney; Sydney to Raine Island, near Torres Straits. (H.M.S. "Challenger.")

Order II.—GYMNOSOMATA.

Family III.—NOTOBRANCHÆIDÆ.

Notobranchæa inopinata, Pelseneer.

Notobranchæa inopinata, Pelseneer, Report on the Pteropoda of H.M.S. "Challenger," Zoology, Vol. XIX, p. 40, pl. 3, fig. 5, 6, 1887.

Notobranchæa inopinata, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. XXIII, p. 280, No. 767, 1889.

Habitat.—Off Port Jackson Heads, New South Wales. (Dr. Macdonald.)

Family IV.—CLIONIDÆ.

Clione caudata, Macdonald.

Cliona caudata, Macdonald, Trans. Royal Society, Edinburgh, Vol. XXIII, p. 185, pl. 9, fig. 3 (*non C. caudata*, Gray).

Cliona caudata, Whitelegge, List of the Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of of New South Wales, Vol. XXIII, p. 280, No. 768, 1889.

Habitat.—Off Port Jackson Heads, New South Wales. (Dr. Macdonald.)

Sydney: Charles Potter, Government Printer.—1892.